UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/719,806	11/21/2003	Leonid Razoumov	010052D1	3290

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EXAMINER
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ART UNIT	PAPER NUMBER
2611	

NOTIFICATION DATE	DELIVERY MODE
03/18/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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	Application No.	Applicant(s)
Office Action Summary	10/719,806	RAZOUMOV ET AL.
	Examiner	Art Unit
	LEILA MALEK	2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>03 March 2010</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-4,6-13 and 15-18</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-4,6-13 and 15-18</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>21 November 2003</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.
5)☐ Notice of Informal Patent Application
6)☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the fee set

forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this

application is eligible for continued examination under 37 CFR 1.114, and the fee set

forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action

has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on

03/03/2010 has been entered.

Response to Arguments

2.   Applicant's arguments filed on 03/03/2010, regarding reference Rhoads have

been fully considered but they are not persuasive.

Applicant's Argument: Applicant argues that one of skill in the art would not combine

Rhodes with the other art of record. Rhodes does not mention anything about energy

values or using energy values to improve the performance of decoders.

Examiner's Response: Examiner asserts that Rhoads discloses a wireless

communication system (see the abstract), wherein a ROM in the telephone device

stores 256 different messages. Rhoads further discloses that when the telephone is

operated, it generates an index for the stored messages and transmits this index to the

call site allowing the central office station to identify the expected message from the

matching database on a secure disk 52 containing the same 256 messages (see

column 12, second paragraph). Although Rhoads does not disclose that the saved

messages are energy values, however, Rhoads's reference contains a general teaching

of saving a value in a memory and sending only the index of that value to the other

parties in a communication system to increase the security of the system (see the

abstract). The same teaching can be applied to the energy values.

Applicant's Argument: Applicant further argues that Rhodes discloses that the

telephone randomly <u>generates</u> a number between 1 and 256, which serves as an index

to these stored messages. Claim 1 recites "selecting an index value <u>representing</u> the

energy value." Hence, as disclosed by Rhodes, a random generation of the index value

would not work if combined with the other references of record to produce the claimed

invention.

Examiner's Response: Since Applicant in the body of claim does not disclose how the

indexes have been selected, generating an index for the stored messages has been

interpreted as selecting an index value representing with a message.

3.   Applicant's arguments with respect to references Choi and Saints have been

considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

4.   Claims 1, 6-10, and 15-18, are rejected under 35 U.S.C. 103(a) as being

unpatentable over Park et al. (hereafter, referred as Park) (US 6,643,520), Rhoads (US

6,278,781), and LaRosa et al. (hereafter, referred as LaRosa) (US 6,628,965), further in

view of Saeijs et al. (hereafter, referred as Saeijs) (US 6,556,590).

As to claims 1, 8, and 9, Park discloses a method for determining an energy

value (see column 3, lines 14-44, column 8, lines 20-59) for a transmission from a first

station (i.e., a mobile station) to a second station (i.e., a base station); forming a

message carrying the energy value (see Fig. 5, Fig. 6, block 654 and Fig. 9, block

913); and transmitting the message to the second station (see Figs. 5 and 6), wherein

the energy value is a pilot to traffic ratio (see column 3, lines 14-44). Park does not

disclose that the energy value is the traffic to pilot ratio as oppose to pilot to traffic ratio,

however, since both ratios represent the relative magnitudes of two quantities, it would

have been obvious to one of ordinary skill in the art to pick any of these ratios (either

pilot to traffic or traffic to pilot) to convey the energy information (i.e. conveying the

energy value of the signal transmitted in the channel) in order to obtain the same

result. Park discloses all the subject matters claimed in claims 1, 8, and 9, except that

there is a decoder residing in the second station. However, Examiner would like to take

official notice that it would have been extremely obvious to one of ordinary skill in the

art at the time of invention to include a decoder in the base station to enable the base

station to recover the transmitted signals. Park also does not disclose locating the

energy value in a look-up table and selecting an index value associated with the

energy value, and forming a message carrying the index value. Furthermore, Park

does not disclose that the message carries an identity of a target destination of the

payload data, a transmission rate of a sub-packet, a number of sub-packets to carry

the full amount of the data payload, and a timing of arrival of the sub-packets. As to the

first limitation, Rhoads discloses a wireless communication system (see the abstract),

wherein a ROM in the telephone device stores 256 different messages. Rhoads further

discloses that when the telephone is operated, it generates an index for the stored

messages and transmits this index to the call site allowing the central office station to

identify the expected message from the matching database on a secure disk 52

containing the same 256 messages (see column 12, second paragraph). Although

Rhoads does not disclose that the saved messages are energy values, however,

Rhoads's reference contains a general teaching of saving a value in a memory and

sending only the index of that value to the other parties in a communication system to

increase the security of the system (see the abstract). Therefore for the reason stated

above, it would have been obvious to one of ordinary skill in the art at the time of

invention to modify Park as suggested by Rhoads to achieve a higher level of security

in the system. Rhoads does not disclose that the ROM is a look-up-table, however,

using a look-up table instead of a ROM is a matter of design choice and it would have

been obvious to one of ordinary skill in the art at the time of invention to use a look-up

table instead of the ROM to meet the design requirements of the system. Park and

Rhoads, disclose all the subject matters claimed in claims 1, 8, and 9, except that the

message also carries an identity of a target destination of a data payload, a

transmission rate of the sub-packet, a number of sub-packets to carry the full amount

of the data payload, and a timing of the arrival of the sub-packets. LaRosa, in the same

field of endeavor, discloses that in a wireless communication system (see column 1,

lines 22-27), the transmission packets may desirably contain: destination address data, representing the identity of the receiver to receive the transmission packets, the transmission rate of the packets, and the number of packets to carry the full amount of the data payload (see column 6, lines 28-45). Although LaRosa does not expressly disclose transmitting the transmission rate and number of sub-packet as oppose to packets, it would have been clearly recognizable to one of ordinary skill in the art at the time of invention to communicate the number and the transmission rate of sub-packets instead of packets to meet the design requirement of the system. It would have been obvious to one of ordinary skill in the art at the time of invention to modify Park and Rhoads as suggested by LaRosa to improve error correction and detection at the receiver. Park, Rhoads, and LaRosa disclose all the subject matters claimed in claims 1, 8, and 9, except that the message also contains a timing of the arrival of the sub-packets. Saeijs discloses a method for transmitting timing critical data (see the abstract). Saeijs discloses that the transmitter side (interpreted for instance as a mobile station) of the channel tags each transmission unit (i.e. a packet (or as explained above it can alternatively be a sub-packet), see column 2, lines 1-25), with the location of the timing critical data and its expected arrival time (see the abstract and column 22, lines 15-40). It would have been obvious to one of ordinary skill in the art at the time of invention to modify Park, Rhoads, and LaRosa as suggested by Saeijs to transmit arrival time information to the receiver to improve the efficiency of communication for time sensitive data information.

As to claim 10, Park discloses an apparatus comprising: a transmission power

control unit (see Fig. 6, the apparatus shown in Fig. 6 has been interpreted as a power

controller) for determining an energy value (see column 3, lines 14-44, column 8, lines

20-59) for a transmission from a first station (i.e., a mobile station) to a second station

(i.e., a base station); a channel element (see block 654) for forming a message

carrying the energy value (see Fig. 5, Fig. 6, block 654 and Fig. 9, block 913); and

transmitting the message to the second station (see Figs. 5 and 6), wherein the energy

value is a pilot to traffic ratio (see column 3, lines 14-44). Park does not disclose that

the energy value is the traffic to pilot ratio as oppose to pilot to traffic ratio, however,

since both ratios represent the relative magnitudes of two quantities, it would have

been obvious to one of ordinary skill in the art to pick any of these ratios (either pilot to

traffic or traffic to pilot) to convey the energy information (i.e. conveying the energy

value of the signal transmitted in the channel) to obtain the same results. Park

discloses all the subject matters claimed in claim 10, except that there is a decoder

residing in the second station. However, Examiner would like to take official notice that

it would have been extremely obvious to one of ordinary skill in the art at the time of

invention to include a decoder in the base station to enable the base station to recover

the transmitted signal. Park also does not disclose locating the energy value in a look-

up table and selecting an index value associated with the energy value, and forming a

message carrying the index value. Furthermore, Park does not disclose that the

message carries an identity of a target destination of the payload data, a transmission

rate of a sub-packet, a number of sub-packets to carry the full amount of the data

payload, and a timing of arrival of the sub-packets. As to the first limitation, Rhoads

discloses a wireless communication system (see the abstract), wherein a ROM in the

telephone device stores 256 different messages. Rhoads further discloses that when

the telephone is operated, it generates an index for the stored messages and transmits

this index to the call site allowing the central office station to identify the expected

message from the matching database on a secure disk 52 containing the same 256

messages (see column 12, second paragraph). Although Rhoads does not disclose

that the saved messages are energy values, however, Rhoads's reference contains a

general teaching of saving a value in a memory and sending only the index of that

value to the other parties in a communication system to increase the security of the

system (see the abstract). Therefore for the reason stated above, it would have been

obvious to one of ordinary skill in the art at the time of invention to modify Park as

suggested by Rhoads to achieve a higher level of security in the system. Rhoads does

not disclose that the ROM is a look-up-table, however, using a look-up table instead of

a ROM is a matter of design choice and it would have been obvious to one of ordinary

skill in the art at the time of invention to use a look-up table instead of the ROM to meet

the design requirements of the system. Park and Rhoads, disclose all the subject

matters claimed in claim 10, except that the message also carries an identity of a target

destination of a data payload, a transmission rate of the sub-packet, a number of sub-

packets to carry the full amount of the data payload, and a timing of the arrival of the

sub-packets. LaRosa, in the same field of endeavor, discloses that in a wireless

communication system (see column 1, lines 22-27), the transmission packets may

desirably contain: destination address data, representing the identity of the receiver to receive the transmission packets, the transmission rate of the packets, and the number of packets to carry the full amount of the data payload (see column 6, lines 28-45). Although LaRosa does not expressly disclose transmitting the transmission rate and number of sub-packet as oppose to packets, it would have been clearly recognizable to one of ordinary skill in the art at the time of invention to communicate the number and the transmission rate of sub-packets instead of packets to meet the design requirement of the system. It would have been obvious to one of ordinary skill in the art at the time of invention to modify Park and Rhoads as suggested by LaRosa to improve error correction and detection at the receiver. Park, Rhoads, and LaRosa disclose all the subject matters claimed in claim 10, except that the message also contains a timing of the arrival of the sub-packets. Saeijs discloses a method for transmitting timing critical data (see the abstract). Saeijs discloses that the transmitter side (interpreted for instance as a mobile station) of the channel tags each transmission unit (i.e. a packet (or as explained above it can alternatively be a sub-packet), see column 2, lines 1-25), with the location of the timing critical data and its expected arrival time (see the abstract and column 22, lines 15-40). It would have been obvious to one of ordinary skill in the art at the time of invention to modify Park, Rhoads, and LaRosa as suggested by Saeijs to transmit arrival time information to the receiver to improve the efficiency of communication for time sensitive data information.

As to claims 7 and 16, Park shows that the first station is a remote station and the second station is a base station (see Fig. 6)

As to claims 6 and 15, Park does not disclose that the first station is a base station and the second station is a remote station. However, it would have been obvious to one of ordinary skill in the art at the time of invention to use the teachings of Park and transfer the power report from the base station to the mobile station instead to control the transmission power of the signals transmitted from the mobile station and therefore reduce the power consumption in the whole system.

As to claim 17, Park discloses an apparatus comprising: a transmission power control unit (see Fig. 6, the apparatus shown in Fig. 6 has been interpreted as power controller) for determining an energy value (see column 3, lines 14-44, column 8, lines 20-59) for a transmission from a first station (i.e., a mobile station) to a second station (i.e., a base station); a channel element (see block 654) for forming a message carrying the energy value (see Fig. 5, Fig. 6, block 654 and Fig. 9, block 913); and transmitting the message to the second station (see Figs. 5 and 6), wherein the energy value is a pilot to traffic ratio (see column 3, lines 14-44). Park does not disclose that the energy value is the traffic to pilot ratio as oppose to pilot to traffic ratio, however, since both ratios represent the relative magnitudes of two quantities, it would have been obvious to one of ordinary skill in the art to pick any of these ratios (either pilot to traffic or traffic to pilot) to convey the energy information (i.e. conveying the energy value of the signal transmitted in the channel) to obtain the same results. Park does not disclose that the transmitter is adapted to transmit the message in a forward link channel to the remote stations. However, it would have been obvious to one of ordinary skill in the art at the time of invention to use the techniques taught by park and transmit

the message in a forward link (as oppose to the reverse link as taught by Park) to

control the transmission power of the signals transmitted from the mobile station as

well and therefore reduce power consumption in the whole system. Park discloses all

the subject matters claimed in claim 17, except that there is a decoder residing in the

second station. However, Examiner would like to take official notice that it would have

been extremely obvious to one of ordinary skill in the art at the time of invention to

include a decoder in the base station to enable the base station to recover the

transmitted signal. Park also does not disclose locating the energy value in a look-up

table and selecting an index value associated with the energy value, and forming a

message carrying the index value. Furthermore, Park does not disclose that the

message carries an identity of a target destination of the payload data, a transmission

rate of a sub-packet, a number of sub-packets to carry the full amount of the data

payload, and a timing of arrival of the sub-packets. As to the first limitation, Rhoads

discloses a wireless communication system (see the abstract), wherein a ROM in the

telephone device stores 256 different messages. Rhoads further discloses that when

the telephone is operated, it generates an index for the stored messages and transmits

this index to the call site allowing the central office station to identify the expected

message from the matching database on a secure disk 52 containing the same 256

messages (see column 12, second paragraph). Although Rhoads does not disclose

that the saved messages are energy values, however, Rhoads's reference contains a

general teaching of saving a value in a memory and sending only the index of that

value to the other parties in a communication system to increase the security of the

system (see the abstract). Therefore for the reason stated above, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Park as suggested by Rhoads to achieve a higher level of security in the system. Rhoads does not disclose that the ROM is a look-up-table, however, using a look-up table instead of a ROM is a matter of design choice and it would have been obvious to one of ordinary skill in the art at the time of invention to use a look-up table instead of the ROM to meet the design requirements of the system. Park and Rhoads, disclose all the subject matters claimed in claim 17, except that the message also carries an identity of a target destination of a data payload, a transmission rate of the sub-packet, a number of sub-packets to carry the full amount of the data payload, and a timing of the arrival of the sub-packets. LaRosa, in the same field of endeavor, discloses that in a wireless communication system (see column 1, lines 22-27), the transmission packets may desirably contain: destination address data, representing the identity of the receiver to receive the transmission packets, the transmission rate of the packets, and the number of packets to carry the full amount of the data payload (see column 6, lines 28-45). Although LaRosa does not expressly disclose transmitting the transmission rate and number of sub-packet as oppose to packets, it would have been clearly recognizable to one of ordinary skill in the art at the time of invention to communicate the number and the transmission rate of sub-packets instead of packets to meet the design requirement of the system. It would have been obvious to one of ordinary skill in the art at the time of invention to modify Park and Rhoads as suggested by LaRosa to improve error correction and detection at the receiver. Park, Rhoads, and LaRosa disclose all the

subject matters claimed in claim 17, except that the message also contains a timing of

the arrival of the sub-packets. Saeijs discloses a method for transmitting timing critical

data (see the abstract). Saeijs discloses that the transmitter side (interpreted for

instance as a mobile station) of the channel tags each transmission unit (i.e. a packet

(or as explained above it can alternatively be a sub-packet), see column 2, lines 1-25),

with the location of the timing critical data and its expected arrival time (see the

abstract and column 22, lines 15-40). It would have been obvious to one of ordinary

skill in the art at the time of invention to modify Park, Rhoads, and LaRosa as

suggested by Saeijs to transmit arrival time information to the receiver improve the

efficiency of communication for time sensitive data information.

As to claim 18, Park discloses an apparatus comprising: a transmission power

control unit (see Fig. 6, the apparatus shown in Fig. 6 has been interpreted as power

controller) for determining an energy value (see column 3, lines 14-44, column 8, lines

20-59) for a transmission from a first station (i.e., a mobile station) to a second station

(i.e., a base station); a channel element (see block 654) for forming a message

carrying the energy value (see Fig. 5, Fig. 6, block 654 and Fig. 9, block 913); and

transmitting the message to the second station (see Figs. 5 and 6), wherein the energy

value is a pilot to traffic ratio (see column 3, lines 14-44). Park further shows that a

transmitter is adapted to transmit the message in a reverse line channel to the base

station (see Fig. 6, block 654 and block 614). Park does not disclose that the energy

value is the traffic to pilot ratio as oppose to pilot to traffic ratio, however, since both

ratios represent the relative magnitudes of two quantities, it would have been obvious

to one of ordinary skill in the art to pick one of these ratios (either pilot to traffic or traffic

to pilot) to convey the energy information to obtain the same results (i.e. conveying the

energy value of the signal transmitted in the channel). Park discloses all the subject

matters claimed in claim 18, except that there is a decoder residing in the second

station. However, Examiner would like to take official notice that it would have been

extremely obvious to one of ordinary skill in the art at the time of invention to include a

decoder in the base station to enable the base station to recover the transmitted signal.

Park also does not disclose locating the energy value in a look-up table and selecting

an index value representing the energy value, and forming a message carrying the

index value. Furthermore, Park does not disclose that the message carries an identity

of a target destination of the payload data, a transmission rate of a sub-packet, a

number of sub-packets to carry the full amount of the data payload, and a timing of

arrival of the sub-packets. As to the first limitation, Rhoads discloses a wireless

communication system (see the abstract), wherein a ROM in the telephone device

stores 256 different messages. Rhoads further discloses that when the telephone is

operated, it generates an index for the stored messages and transmits this index to the

call site allowing the central office station to identify the expected message from the

matching database on a secure disk 52 containing the same 256 messages (see

column 12, second paragraph). Although Rhoads does not disclose that the saved

messages are energy values, however, Rhoads's reference contains a general

teaching of saving a value in a memory and sending only the index of that value to the

other parties in a communication system to increase the security of the system (see the

abstract). Therefore for the reason stated above, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Park as suggested by Rhoads to achieve a higher level of security in the system. Rhoads does not disclose that the ROM is a look-up-table, however, using a look-up table instead of a ROM is a matter of design choice and it would have been obvious to one of ordinary skill in the art at the time of invention to use a look-up table instead of the ROM to meet the design requirements of the system. Park and Rhoads, disclose all the subject matters claimed in claim 18, except that the message also carries an identity of a target destination of a data payload, a transmission rate of the sub-packet, a number of sub-packets to carry the full amount of the data payload, and a timing of the arrival of the sub-packets. LaRosa, in the same field of endeavor, discloses that in a wireless communication system (see column 1, lines 22-27), the transmission packets may desirably contain: destination address data, representing the identity of the receiver to receive the transmission packets, the transmission rate of the packets, and the number of packets to carry the full amount of the data payload (see column 6, lines 28-45). Although LaRosa does not expressly disclose transmitting the transmission rate and number of sub-packet as oppose to packets, it would have been clearly recognizable to one of ordinary skill in the art at the time of invention to communicate the number and the transmission rate of sub-packets instead of packets to meet the design requirement of the system. It would have been obvious to one of ordinary skill in the art at the time of invention to modify Park and Rhoads as suggested by LaRosa to improve error correction and detection at the receiver. Park, Rhoads, and LaRosa disclose all the

subject matters claimed in claim 18, except that the message also contains a timing of

the arrival of the sub-packets. Saeijs discloses a method for transmitting timing critical

data (see the abstract). Saeijs discloses that the transmitter side (interpreted for

instance as a mobile station) of the channel tags each transmission unit (i.e. a packet

(or as explained above it can alternatively be a sub-packet), see column 2, lines 1-25),

with the location of the timing critical data and its expected arrival time (see the

abstract and column 22, lines 15-40). It would have been obvious to one of ordinary

skill in the art at the time of invention to modify Park, Rhoads, and LaRosa as

suggested by Saeijs to transmit arrival time information to the receiver to improve the

efficiency of communication for time sensitive data information.

5.   Claims 2 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Park, Rhoads, LaRosa, and Saeijs, further in view of Balachandran (US 6,608,828).

        As to claims 2 and 11, Park, Rhoads, LaRosa, and Saeijs, disclose all the subject

matters claimed in claims 1 and 10, except for positioning the message in a preamble.

Balachandran, in the same field of endeavor, discloses a header (see Fig. 8)

(interpreted as preamble) (interpreted as a message) that is repeatedly transmitted and

received, along with data, on a radio channel, wherein the header is decoded to identify

values for the header fields (see the abstract). Balachandran further discloses that the

header comprises a power reduction field (see column 4, lines 25-30) to increase the

reliability of the decoding process (see column 4, lines 25-33). It would have been

obvious to one of ordinary skill in the art at the time of invention to position the power

control information in the preamble in order to inform the power control information to

the second station right after the start of data reception and adjust signal power as soon as possible.

6.   Claims 3, 4, 12, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Park, Rhoads, LaRosa, and Saeijs, further in view of Guo et al. (hereafter, referred as Guo) (US 6,389,034).

As to claims 3 and 12, Park, Rhoads, LaRosa, and Saeijs, disclose all the subject matters claimed in claims 1 and 10, except that the step of transmitting the message (power control information) comprises positioning the message in a sub-packet. Guo, in the same field of endeavor, discloses an apparatus comprising a base station and plurality of remote terminals. Guo discloses a frame structure, which includes sub-channel information (including power control information) being transmitted from the base station to the remote terminals or vice versa (see column 14, last paragraph). Guo further discloses that transmitting the power control information comprises positioning the information in a sub-packet (see column 14, lines 27-41). It would have been obvious to one of ordinary skill in the art at the time of invention to place the power control information (i.e. value of the signal energy) in the sub-packet before transmitting them form a base station to a mobile station or vice versa in order to make the extraction of the information fast and easy (i.e. without detecting and processing the header) and as the result make very quick power control adjustments as suggested by Guo (see column 14, lines 29-33).

As to claim 4 and 13, Park, Rhoads, LaRosa, and Saeijs, disclose all the subject matters claimed in claims 1 and 10, except that the step of transmitting the message

(power control information) comprises positioning the message between a preamble and a sub-packet. Guo shows that the step of transmitting the message comprises positioning the message between a preamble and a sub-packet (see Fig. 4B). It would have been obvious to one of ordinary skill in the art at the time of invention to position the power control information (i.e. value of the signal energy) between the preamble and the sub-packet to make the extraction of the power control information fast and easy (i.e. without processing the preamble) and as the result make very quick power control adjustments as suggested by Guo (see column 14, lines 29-41).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leila Malek whose telephone number is 571-272-8731. The examiner can normally be reached on 9AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad Ghayour can be reached on 571-272-3021. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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                                                        Leila Malek
                                                        Examiner
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